MAY THE FORCE BE WITH YOU

In 128/octave overtone tuning, 12tet, and quartertones
for
Tenor/Bass Trombone

Peter Thoegersen

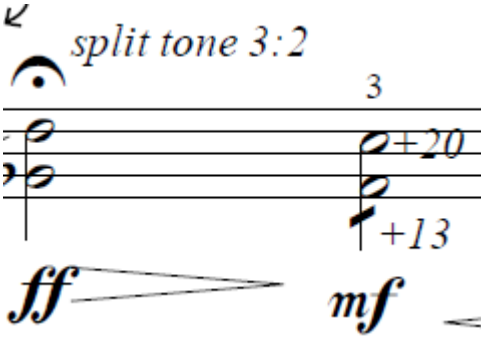
2017

LEGEND

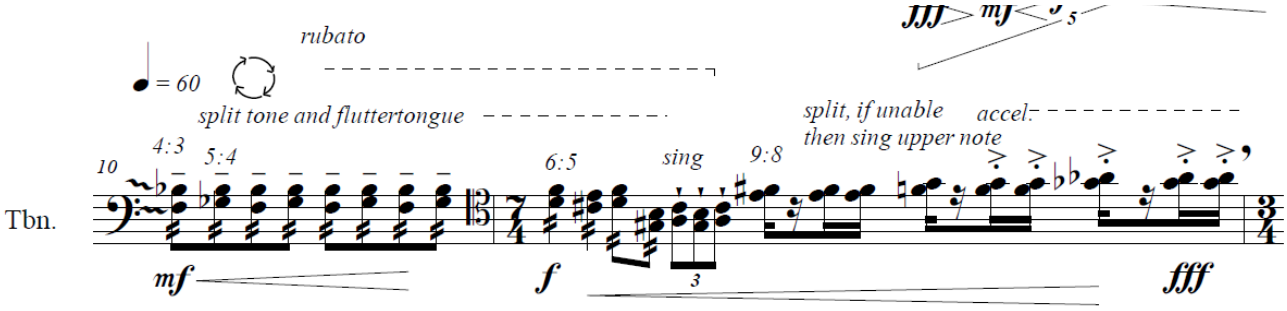
With the understanding that the tenor trombone and bass trombone both share the same length tube, and that the range of both instruments are the same, particularly tenor trombone with the F-attachment, I do realize the secure footing the bass trombone has in the lower registers over the tenor trombone. I also understand that the mouthpiece bore is wider and that the tubing in general is wider in the bass trombone, and that more air is required. So, I leave it up to the soloist to choose which instrument to play at whichever section he or she chooses.

As for the extended techniques in this work, there are: split tones, singing while playing, sum and difference tones, circular breathing, and microtones.

Split Tones:



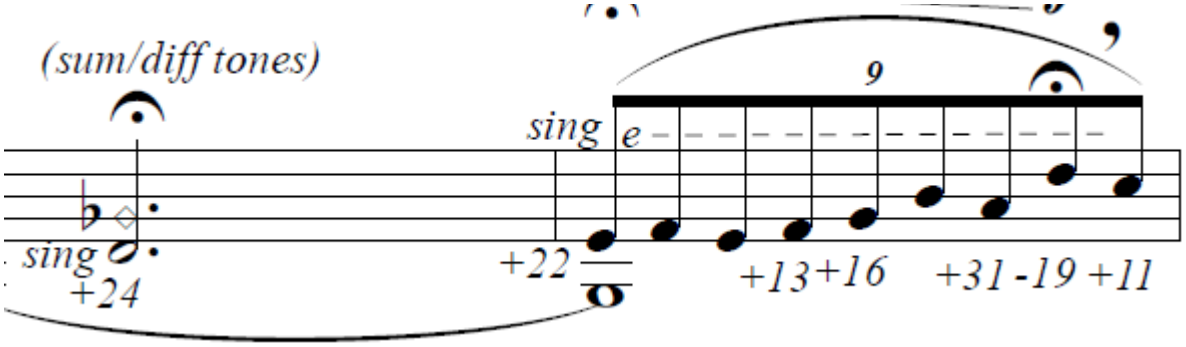
The top note and bottom note are both played by each lip, respectively, and although a difficult technique to master, I will assume that after a while, this technique can be rhythmically controlled:



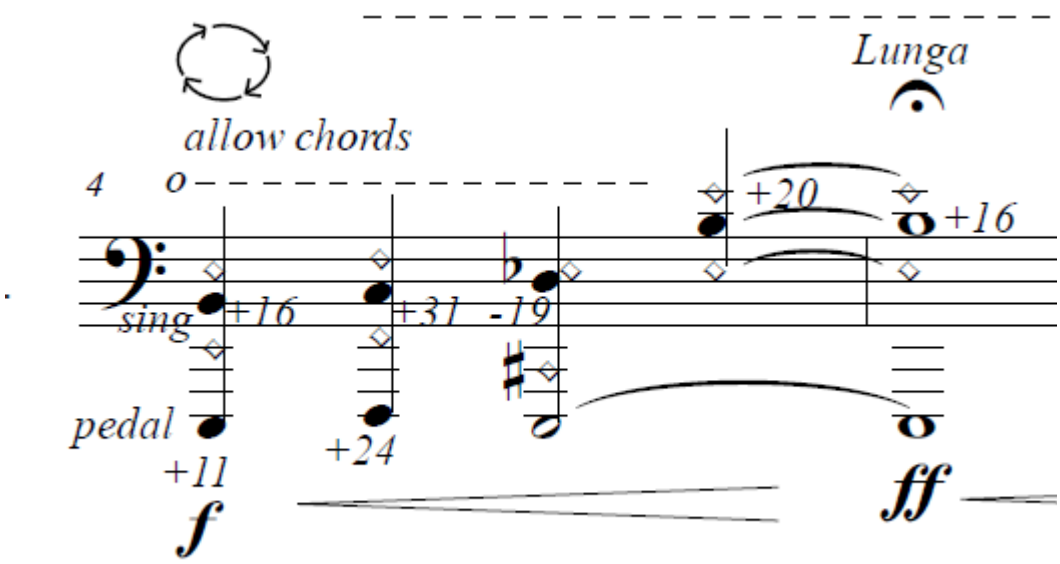
such pointed and angular rhythmic demands may appear impossible at first sight, but I believe that with familiarity and practice that these split tone figures can be played as written, and at tempo, in time. As the brass player must think of the pitch in his mind, first, and then and only then, execute it, I believe that split tones will wind up being quite the same, such that difficult rhythmic figures can be executed with precision. In this instance, if the soloist is unable to play the split tones at tempo, even though I have indicated it as *rubato,* I provided an instruction allowing the player to sing the upper note, instead, until the figures can be performed as written.

Singing while playing:

Please sing the upper note while playing the bottom pedal tones, or figures, and please aim for pitch accuracy while allowing all the concomitant sum and difference tones to sound forth.

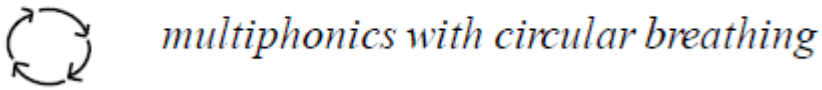


Additionally, I have stressed various vowel sounds to act as filters in the mouth for the production, or enhancement of certain partials.



Sum and difference tones may appear as diamond head shapes when played and sung into the trombone.

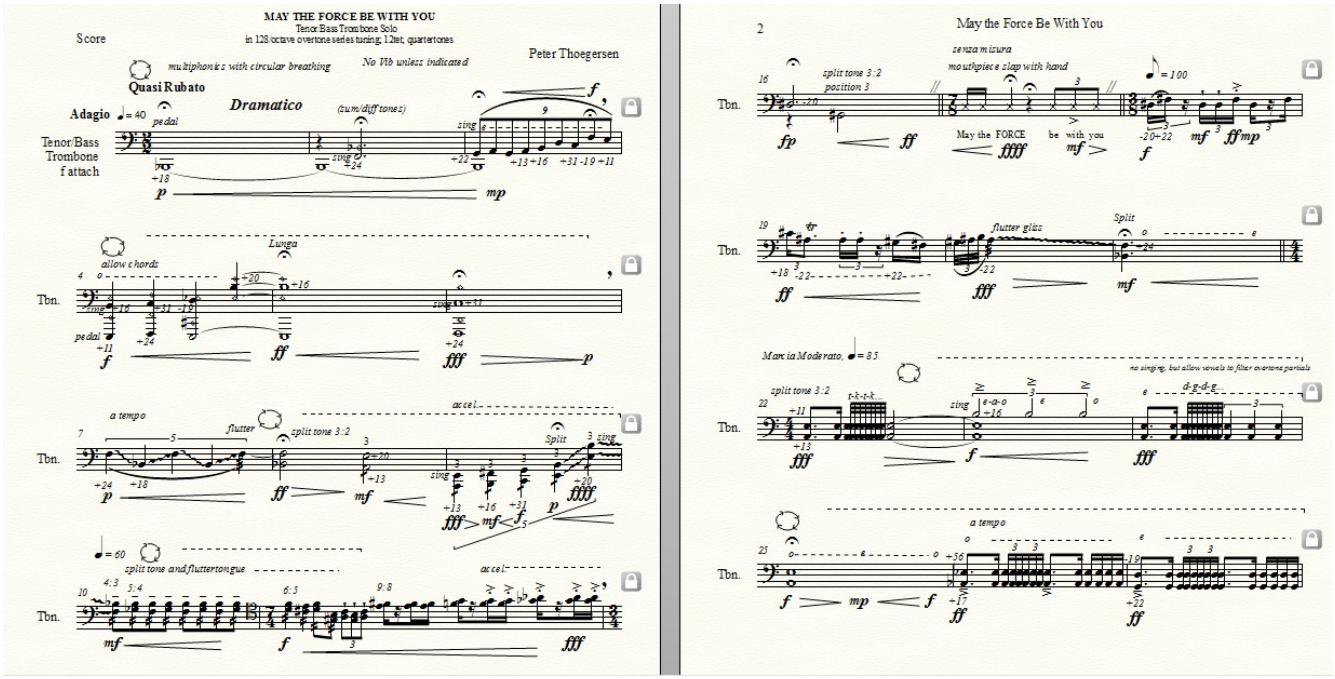
Circular breathing:



Circular breathing will be applied for a constant, non-interrupted texture.

Theater:

There is a repeated phrase, from the movie Star Wars, “May the force be with you.” Please be dramatic and loud, or nuanced, or however you would like to act it out. Please take your time and do not rush it. Please, also, do not try to be deliberately funny, either, but a bit of melodrama is OK.



Microtones:

This work is polymicrotonal. I am employing Johnny Reinhard's 128/octave overtone series tuning, described later in this legend, standard 12tet, and quartertones, which are self evident in the score. Some of the spelling of the quartertones are deliberate, such as: Bb 1/4 flat, for example, as opposed to spelling it A ¾ sharp, with the tic-tac-toe sign. I have just only used two very standard quartertone symbols, rather than the more confusing and ambiguous microtonal symbols. In general, I simply use cents.

128 Notes of Eighth Octave Overtone Tuning

Harmonic, Cents, Name of interval

1	0	unison
129	13	sixteenthtone
65	27	eighthtone
131	40	smaller quartertone
33	53	quartertone
133	66	large quartertone
67	79	small semitone / 3-eighthtones
135	92	minor semitone
17	105	Bb, major semitone
137	118	large semitone
69	130	big semitone
139	143	small three quarters of a tone
35	155	large three quarters of a tone
141	167	diminished whole tone
71	180	small whole tone
143	192	minor whole tone
9	204	B, major whole tone
145	216	large whole tone
73	228	whole plus eighthtone
147	240	5ET diesis
37	251	five quarters of a tone
149	263	diminished minor third
75	275	low minor third
151	286	small minor third
19	298	minor third
153	309	low just minor third (referencing 316)
77	320	high just minor third (referencing 316)
155	331	large minor third
39	342	big minor third
157	354	neutral third
79	365	tiny major third
159	375	eighthtone flat major third
5	386	C#, just major third
161	397	ET major third
81	408	Pythagorean ditone
163	418	large Pythagorean ditone
41	429	Db
165	440	small quartertone sharp major third
83	450	quartertone sharp major third
167	460	tiny fourth
21	471	low fourth
169	481	minor fourth
85	491	major fourth

171	501	ET perfect fourth
43	512	perfect fourth, D
173	522	fourth plus comma
87	532	fourth plus a fifthtone
175	541	fourth plus small quartertone
11	551	eleventh harmonic
177	561	tiny tritone
89	571	low tritone
179	581	minor tritone
45	590	D#
181	600	Eb, ET tritone
91	609	large tritone, Eb in tonal music
183	619	big tritone
23	628	eighthtone high tritone
185	638	quartertone and sixteenth flat dominant
93	647	quartertone flat dominant
187	656	tiny dominant
47	666	small dominant
189	675	eighthtone low dominant
95	684	irregular perfect fifth
191	693	sixth comma flat fifth
3	702	perfect fifth
193	711	poodle fifth
97	720	large fifth
195	729	howling dominant
49	738	sixthtone high dominant
197	746	three quartertones high perfect fifth
99	755	quartertone high perfect fifth
199	764	quartertone and 16th tone high fifth
25	773	quartertone and eighthtone high fifth
201	781	almost minor sixth
101	790	tiny minor sixth
203	798	ET minor sixth
51	807	minor sixth
205	815	just minor sixth
103	824	large minor sixth
207	832	big minor sixth
13	841	thirteenth harmonic
209	849	quartertone high minor sixth
105	857	quartertone plus minor sixth
211	865	almost major sixth
53	874	tiny major sixth
213	882	small major sixth
107	890	just major sixth
215	898	ET major sixth
27	906	major sixth
217	914	sixthtone high major sixth
109	922	eighthtone high major sixth
219	930	eighthtone and 16th tone high major sixth

55	938	large major sixth
221	945	big major sixth
111	953	three quartertone sharp major sixth
223	961	small harmonic seventh
7	969	harmonic seventh
225	977	large harmonic seventh
113	984	tiny minor seventh
227	992	small minor seventh
57	999	G, minor seventh
229	1007	large minor seventh
115	1015	big minor seventh
231	1022	double perfect fourth
29	1030	eighthtone high major seventh
233	1037	eighth- and 16th tone high minor seventh
117	1044	three-eighths flat major seventh
235	1052	quartertone flat minor seventh
59	1059	tiny major seventh
237	1066	diminished major seventh
119	1074	eighthtone flat major seventh
239	1081	small major seventh
15	1088	major seventh
241	1095	large major seventh
121	1103	ET major seventh
243	1110	big major seventh
61	1117	Ab, large minor seventh
245	1124	eighthtone plus major seventh
123	1131	leading tone major seventh
247	1138	sharp leading tone major seventh
31	1145	hyper leading tone major seventh
249	1152	quartertone flat octave
125	1159	three-eighths flat octave
251	1166	eighthtone flat octave
63	1173	small octave
253	1180	comma flat octave
127	1186	dipped octave
255	1193	preoctave

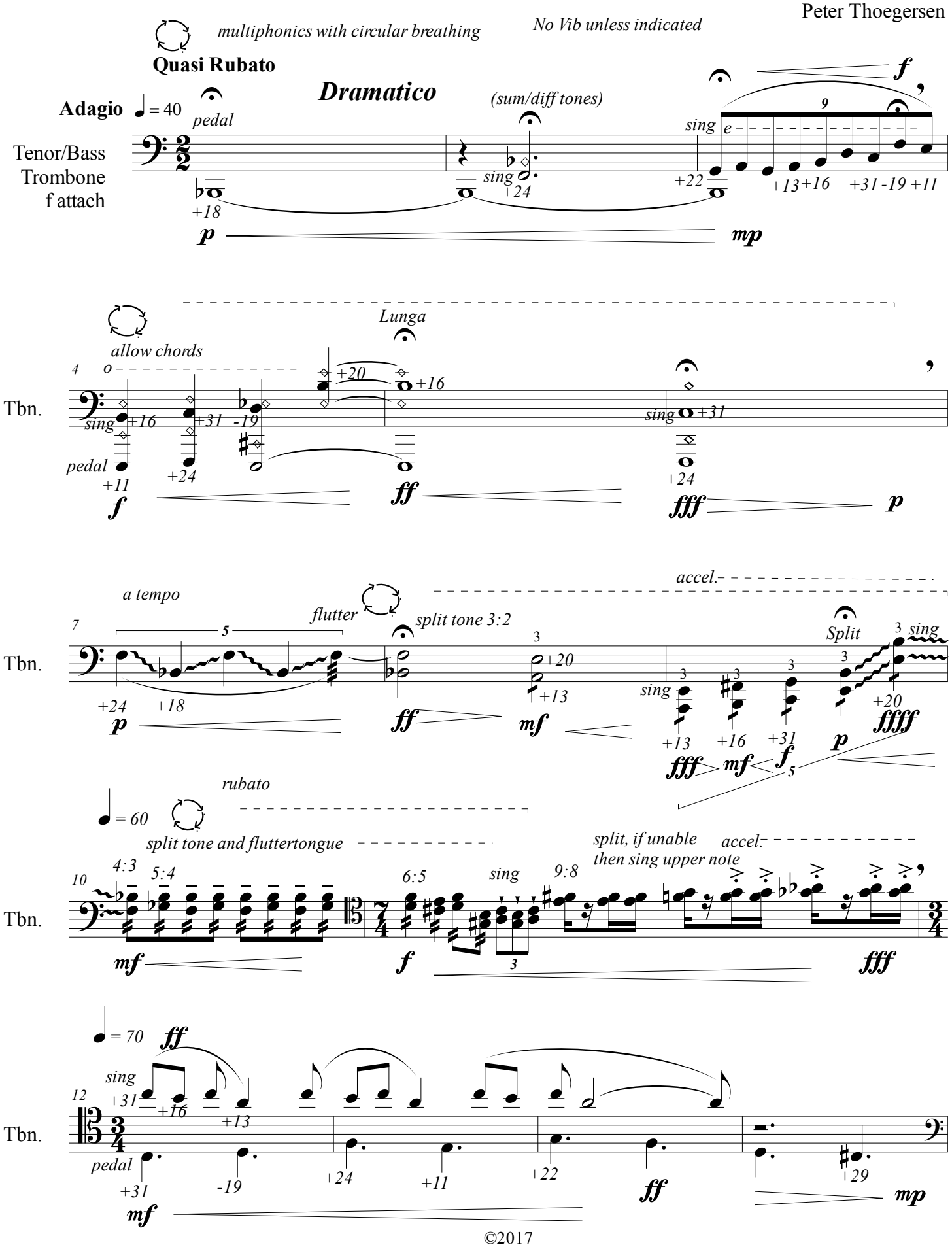
MAY THE FORCE BE WITH YOU

Tenor/Bass Trombone Solo

in 128/octave overtone series tuning; 12tet; quartertones

Score

Peter Thoegersen



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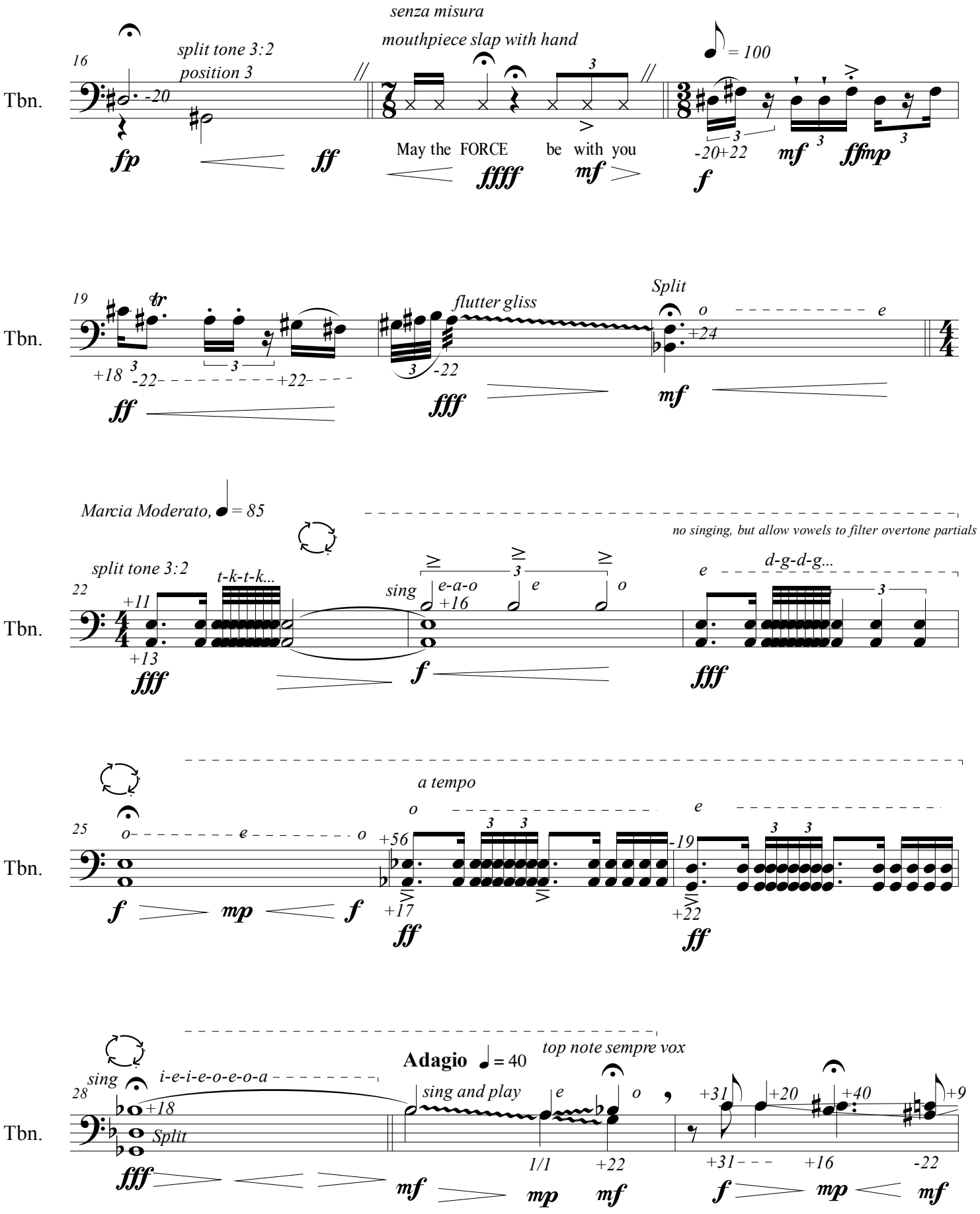
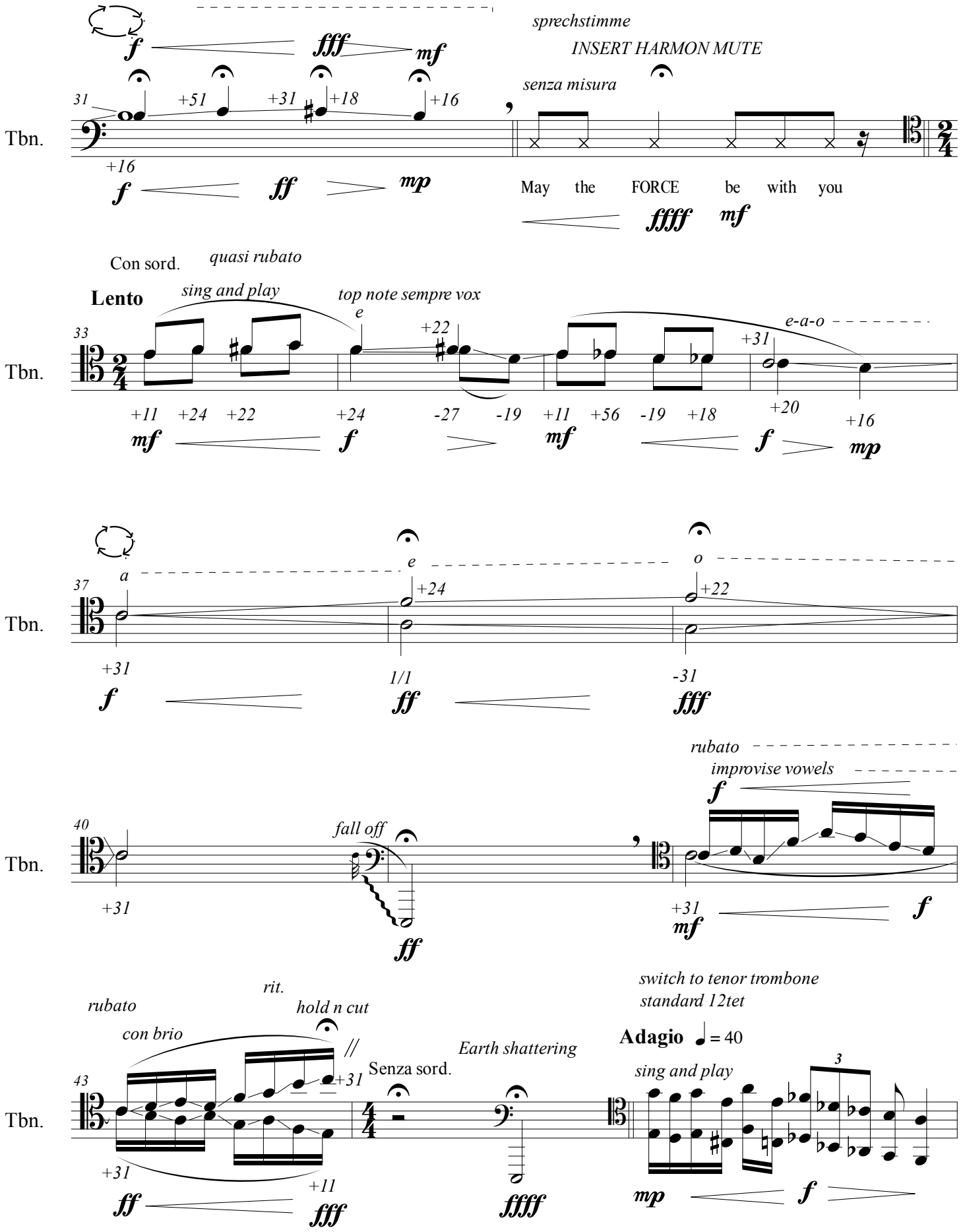
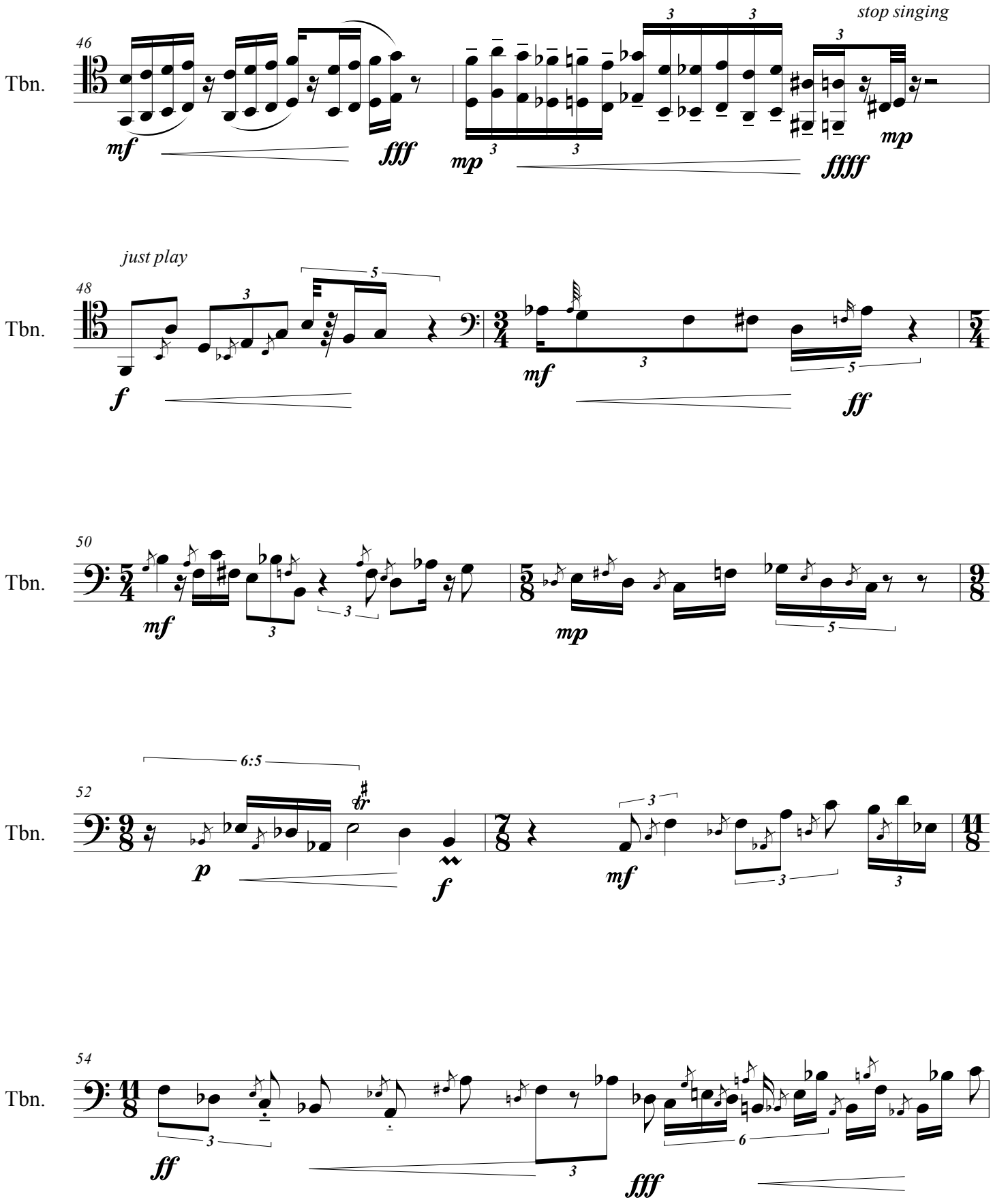
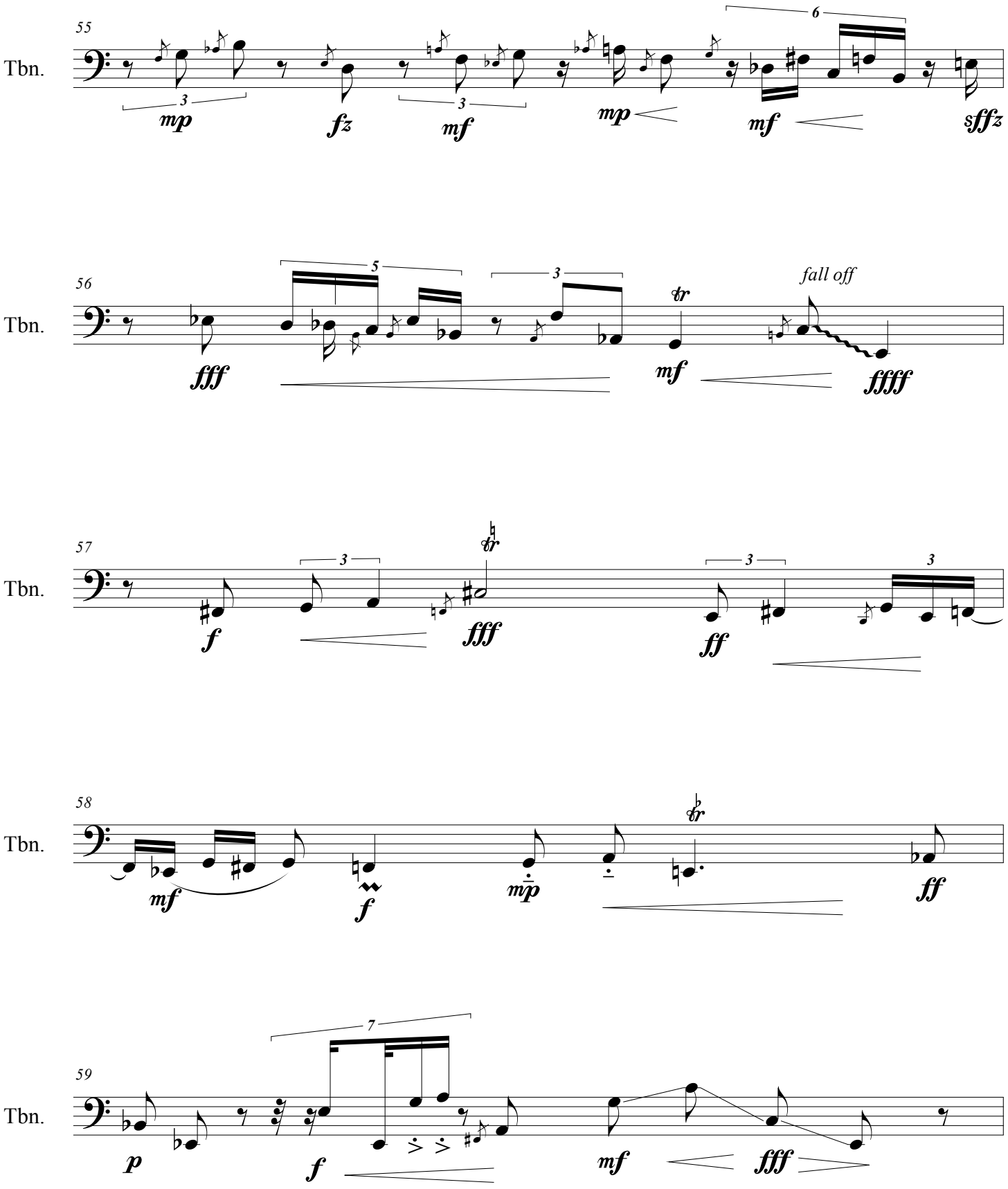
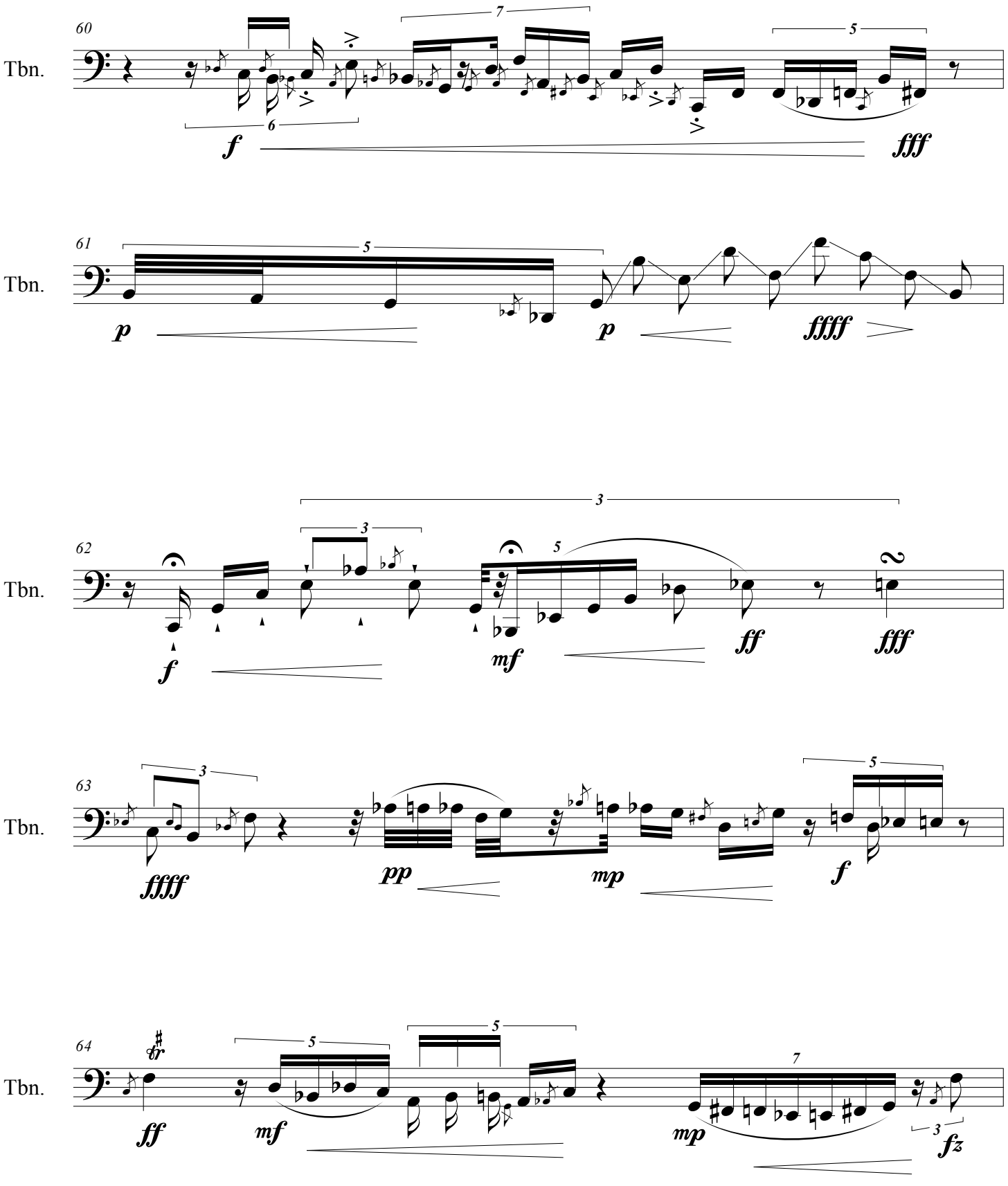
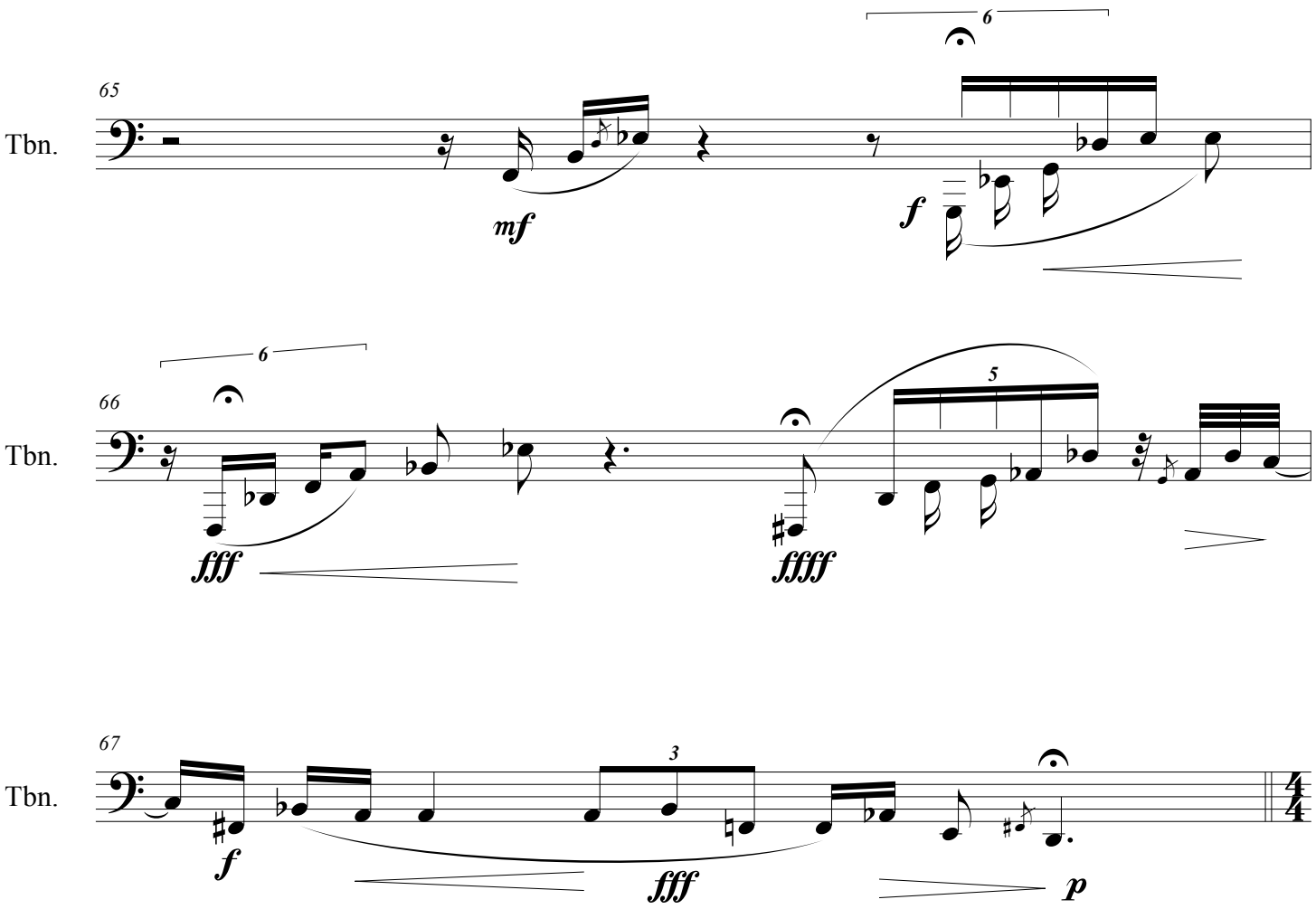

senza misura
mouthpiece slap with hand
split tone 3:2
position 3
= 100
Tbn.
May the FORCE be with you
flutter gliss
Split
Marcia Moderato, = 85
no singing, but allow vowels to filter overtone partials
split tone 3:2
t-k-t-k...
sing
e-a-o
d-g-d-g...
a tempo
Adagio = 40
top note sempre vox
sing
i-e-i-e-o-e-o-a
sing and play
Split


Tbn.
sprechstimme
INSERT HARMON MUTE
senza misura
May the FORCE be with you
Con sord.
quasi rubato
Lento
sing and play
top note sempre vox
e-a-o
rubato
improvise vowels
fall off
switch to tenor trombone
standard 12tet
rit.
rubato
hold n cut
con brio
Earth shattering
Senza sord.
Adagio ♩= 40
sing and play

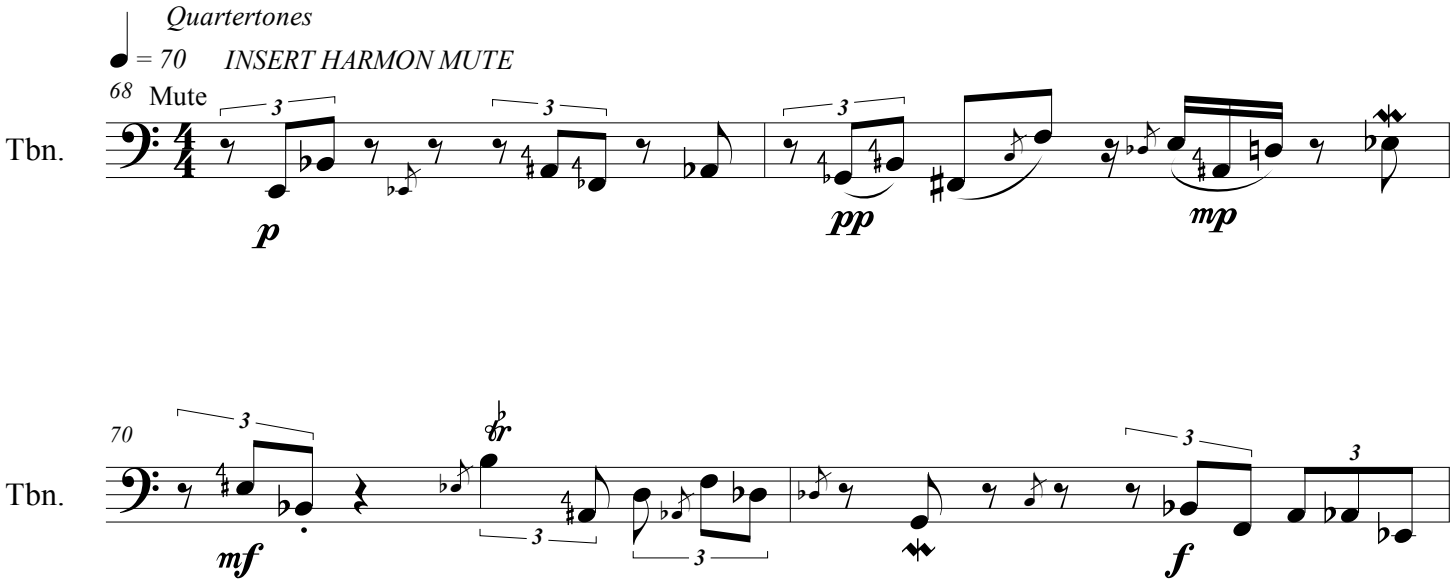

46
Tbn.
mf
fff
mp
ffff
mp
stop singing
48
just play
Tbn.
f
mf
ff
50
Tbn.
mf
mp
52
Tbn.
p
f
mf
54
Tbn.
ff
fff

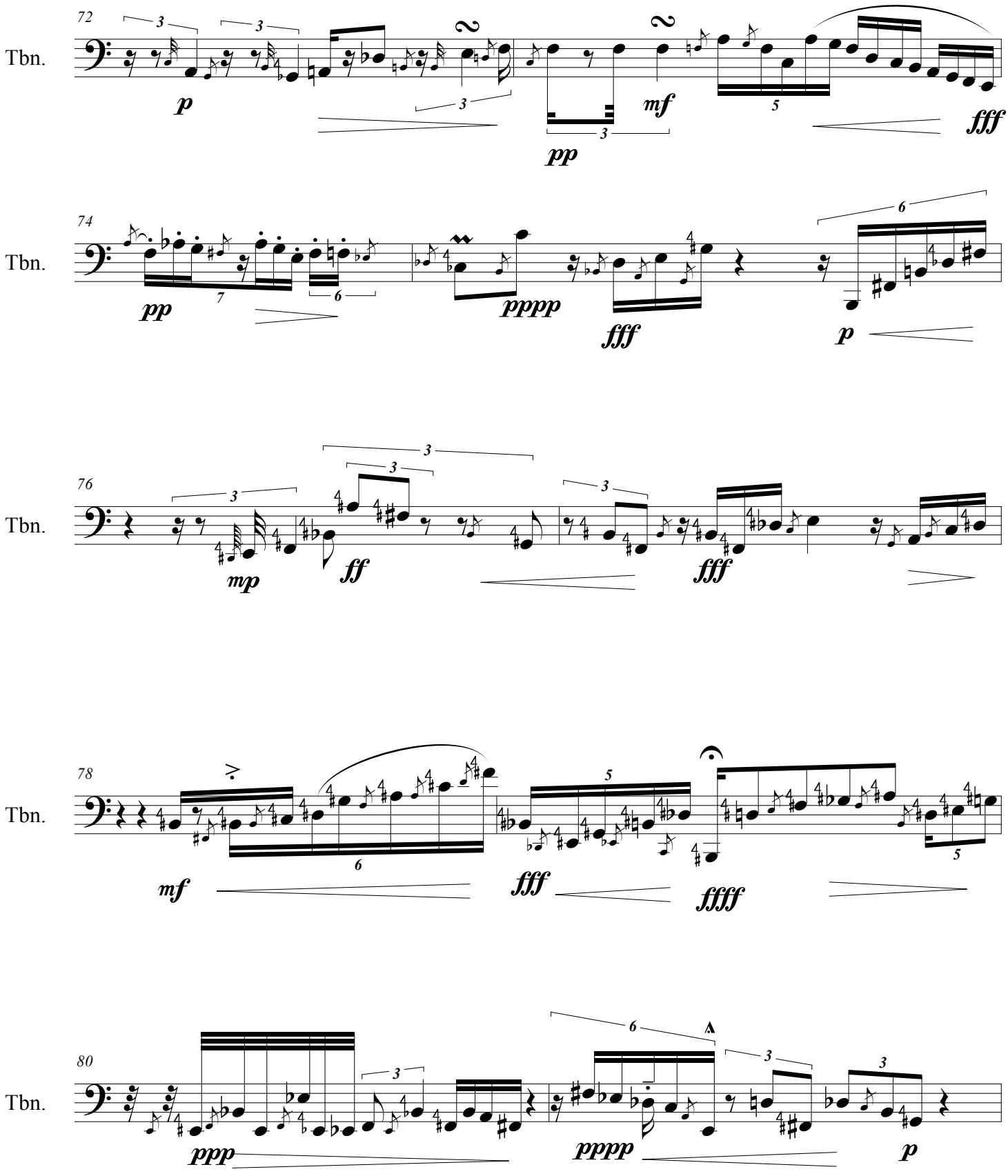

55
Tbn.
mp
fz
mf
mp
mf
sffz
56
Tbn.
fff
mf
fall off
ffff
57
Tbn.
f
fff
ff
58
Tbn.
mf
f
mp
ff
59
Tbn.
p
f
mf
fff

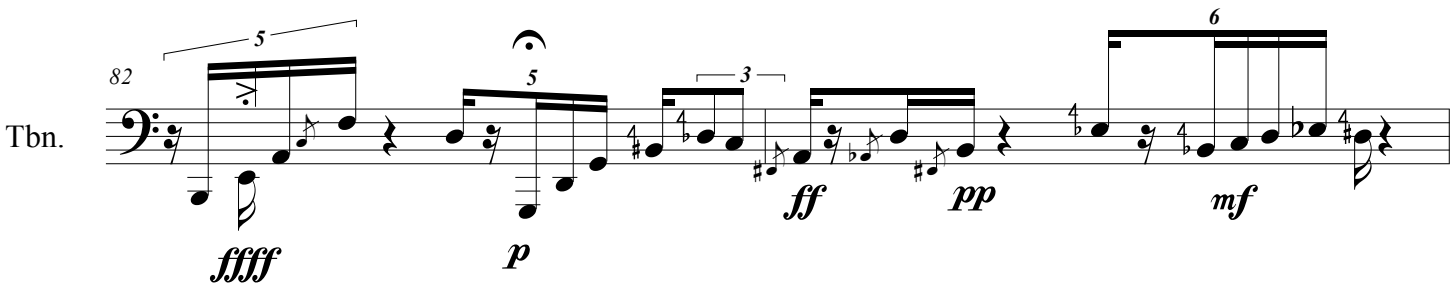

60
Tbn.
7
6
5
f
fff
61
Tbn.
5
p
p
ffff
62
Tbn.
3
3
5
f
mf
ff
fff
63
Tbn.
3
5
ffff
pp
mp
f
64
Tbn.
5
5
7
ff
mf
mp
3
fz

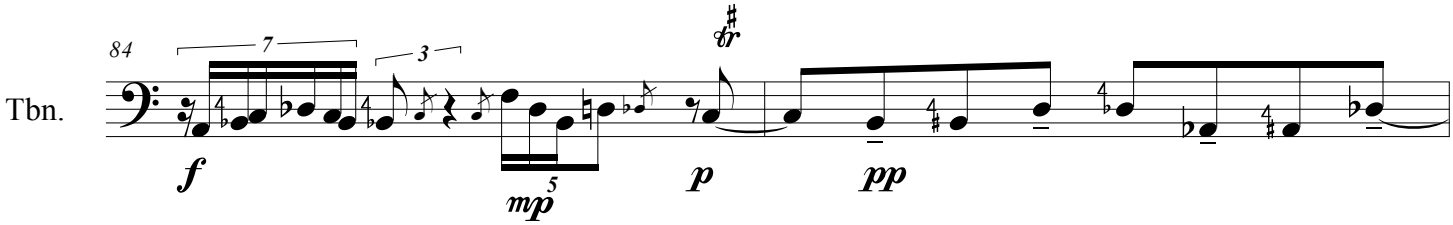

65
Tbn.
6
mf
f
66
Tbn.
6
fff
5
ffff
67
Tbn.
f
3
fff
p

Adagietto

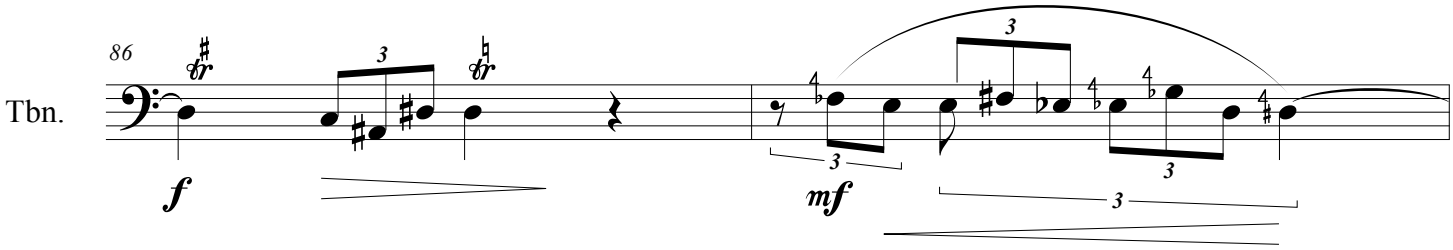

Quartertones
= 70
INSERT HARMON MUTE
68 Mute
Tbn.
3
p
pp
mp
70
Tbn.
mf
tr
f

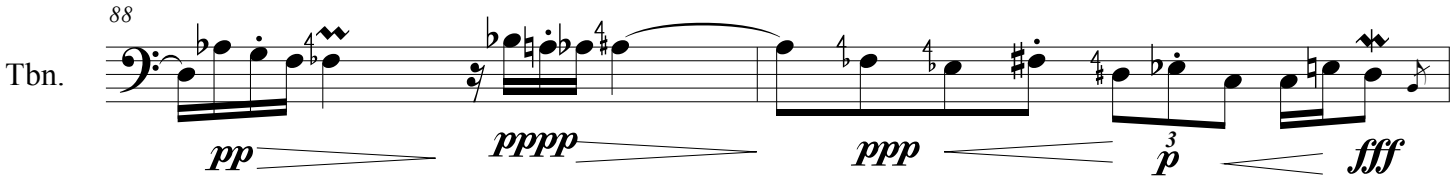

72
Tbn.
p
pp
mf
fff
74
Tbn.
pp
pppp
fff
p
76
Tbn.
mp
ff
fff
78
Tbn.
mf
fff
ffff
80
Tbn.
ppp
pppp
p

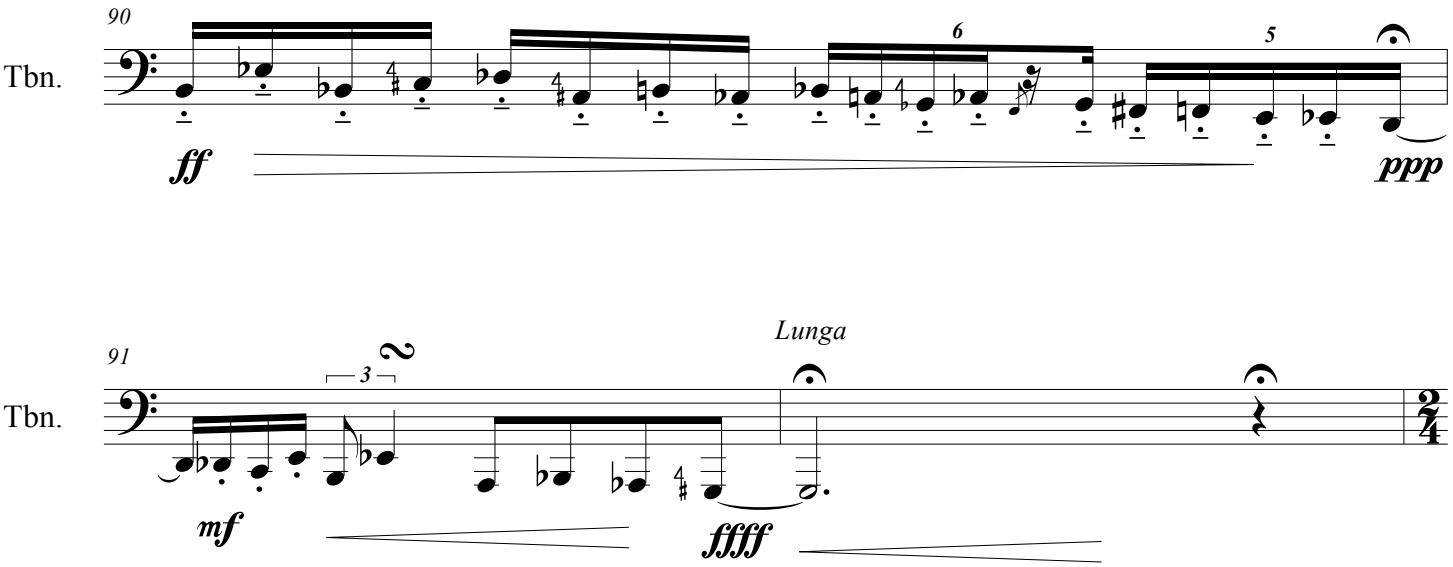

82
Tbn.
fffff
p
ff
pp
mf


84
Tbn.
f
mp
p
pp

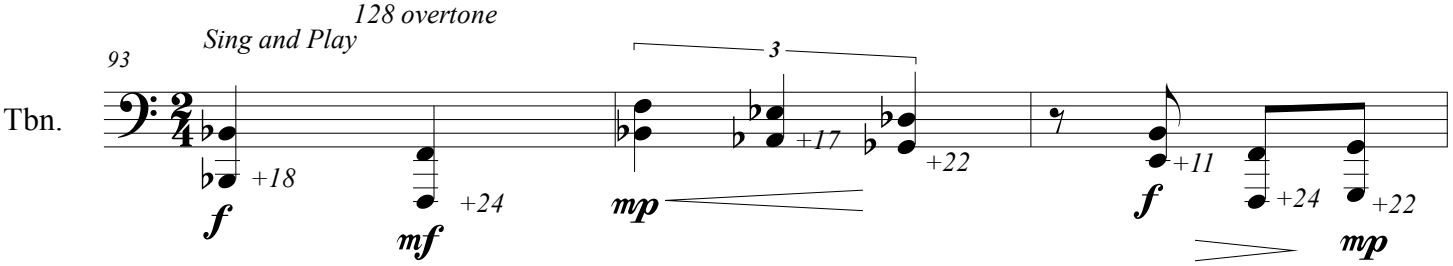
Senza Sord.

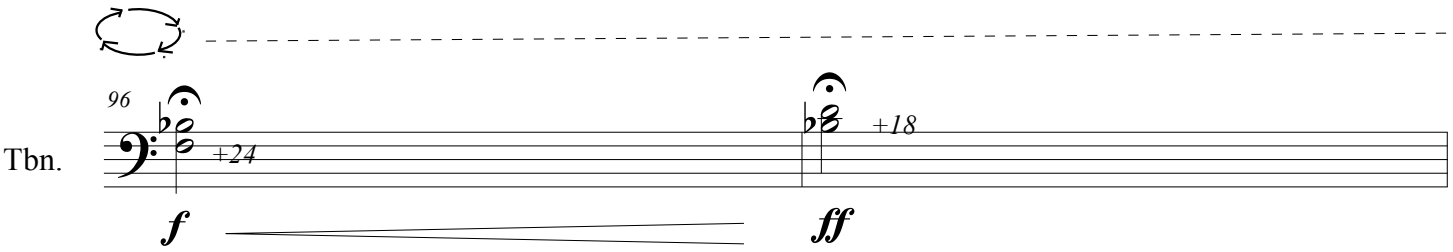

86
Tbn.
f
mf

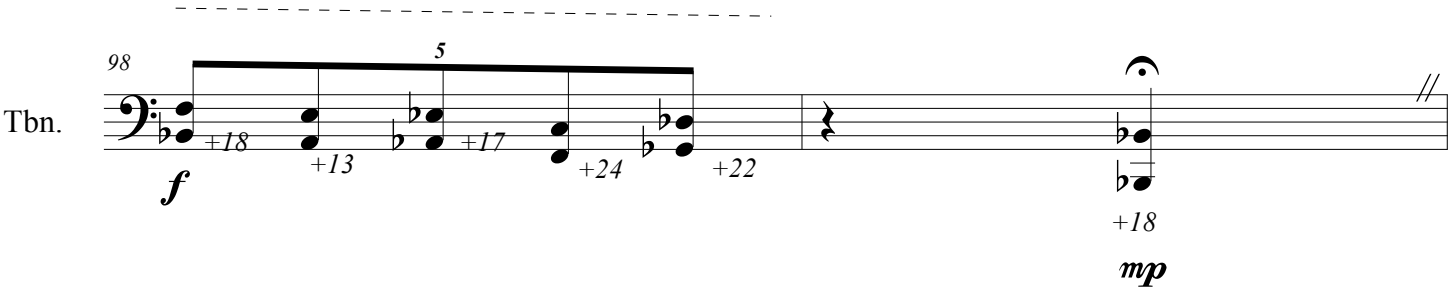

88
Tbn.
pp
pppp
ppp
p
fff



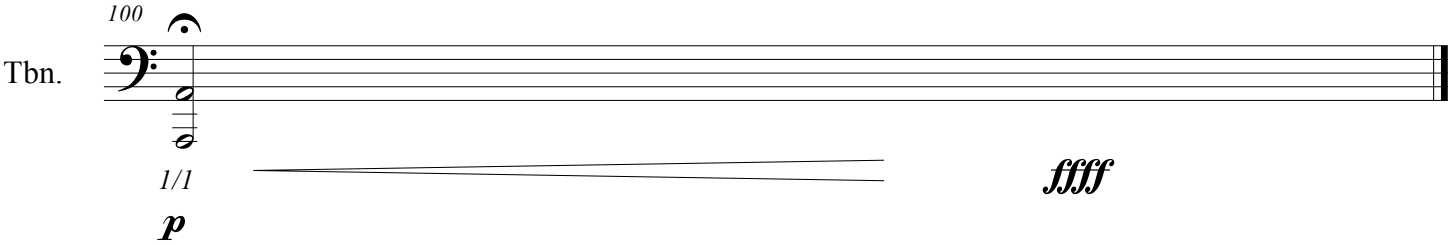
Grave *rubato*







Molto Lunga



(@ 10-12 min.)